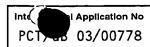


INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6120653			of International Search Report , where applicable, item 5 below.
International application No.	International filing date (day/n	nonth/year) (Earliest) P	riority Date (day/month/year)
PCT/GB 03/00778	18/02/2003		31/05/2002
Applicant			
HITACHI, LTD.			
This International Search Report has bee according to Article 18. A copy is being tra	n prepared by this International ansmitted to the International Bu	Searching Authority and is transcreau.	ansmitted to the applicant
This International Search Report consists X It is also accompanied by	of a total of6 a copy of each prior art docume	_ sheets. ent cited in this report.	
Basis of the report			
a. With regard to the language, the language in which it was filed, un	international search was carried ess otherwise indicated under t	out on the basis of the inter his item.	national application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a	translation of the internation	al application furnished to this
b. With regard to any nucleotide ar was carried out on the basis of the	e sequence listing :	closed in the international ap	plication, the international search
<u> </u>	onal application in written form. ernational application in compute	er readable form	
	this Authority in written form.	i readable form.	
	this Authority in computer read	ble form.	
the statement that the sul	osequently furnished written sed as filed has been furnished.		yond the disclosure in the
• • • • • • • • • • • • • • • • • • • •		eadable form is identical to t	he written sequence listing has been
2. X Certain claims were fou	nd unsearchable (See Box I).		
3. Unity of invention is lac	king (see Box II).		
4. With regard to the title,	•		
X the text is approved as so	ubmitted by the applicant.		
the text has been established	shed by this Authority to read as	follows:	
5. With regard to the abstract,			
	ubmitted by the applicant.		
the text has been established within one month from the	shed, according to Rule 38.2(b) e date of mailing of this internat	by this Authority as it appea onal search report, submit o	rs in Box III. The applicant may, omments to this Authority.
6. The figure of the drawings to be pub	lished with the abstract is Figure	e No.	1
X as suggested by the app	licant.		None of the figures.
because the applicant fai	led to suggest a figure.		
because this figure bette	r characterizes the invention.		

IN TRNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04B1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 HO4B HO4L HO3G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

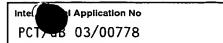
EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α .	US 5 939 951 A (BATEMAN ANDREW ET AL) 17 August 1999 (1999-08-17) abstract figures 8-10 column 4, line 46-48 column 9, line 41-46	1-10
A	EP 1 043 833 A (LUCENT TECHNOLOGIES INC) 11 October 2000 (2000-10-11) abstract column 9, line 55-58 column 10, line 49-54 column 11, line 19-23 column 15, line 21-35 figures 4,5 -/	1-10

Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the international filing date C* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filing date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "8" document member of the same patent family
Date of the actual completion of the international search 13 June 2003	Date of mailing of the international search report 25/06/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer GONZALEZ GUTIER, B

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		PC17-45 03/00//8	
	Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
A	SU H-J ET AL: "ADAPTIVE CLOSED-LOOP POWER CONTROL WITH QUANTIZED FEEDBACK AND LOOP FILTERING" IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, IEEE, PISCATAWAY, US, vol. 1, no. 1, January 2002 (2002-01), pages 76-86, XP001143807 ISSN: 1536-1276 figures 1-4,9,11 page 79, column 7 page 81, column 11 page 82, column 13 page 85, column 19 page 85, column 20 page 86, column 21	1-10	

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International Application No. PCTGB 03 00778

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 11,12

The subject-matter of the claims 11 and 12 is defined by references to the description and/or the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here. These claims fail to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, according to Article 17(2)(a)(ii)PCT.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.





Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. X Claims Nos.: 11,12 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims. .
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

on on patent family members

Inte	Application No	-
PCT/ GB	03/00778	

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5939951	A	17-08-1999	CA EP WO JP	2222091 A1 0835549 A1 9637948 A1 11505979 T	28-11-1996 15-04-1998 28-11-1996 25-05-1999
EP 1043833	Α	11-10-2000	EP	1043833 A1	11-10-2000